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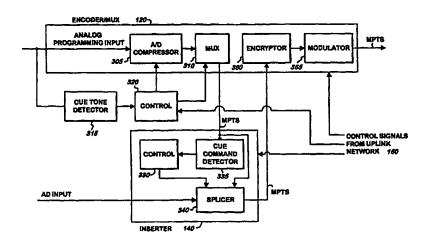
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(54) Title: APPARATUS AND METHOD FOR DIGITAL ADVERTISEMENT INSERTION IN A BITSTREAM



### (57) Abstract

A system for inserting commercials (340) into an audiovisual bit stream by providing cue commands (320) in response to cue tones (315) in a pre-existing analog signal, and/or in response to control signals from an uplink (/programmer/network) site (100) or headend (/affiliate) (200). Firmware upgrades are provided to a digital encoder (120) to facilitate generating spliceable bit streams and generation of cue commands. This enables commercial insertion at an uplink site (/programmer/network) (100) as well as at a cable television headend (/affiliate) (200). The system provides functional compatibility between a digital bit stream (150) and the analog cue tones. The cue commands are preferably carried in the transport layer of the bit stream so there is no need to decode and process several layers of the bit stream. Accordingly, a new commercial insertion capability can be added to existing uplink and headend equipment in a backward compatible manner minimizing upgrade-related expenses, yet allowing different splicing techniques to be employed depending on cost-performance tradeoffs in terms of desired post-splicing audiovisual quality.